



RESPONSE UNDER 37 CFR 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2814

PATENT APPLICATION
Do. No. 9898-189

NE
7/0
3-18-03
J. Carter

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Yoo-Sang HWANG and Su-Jin AHN

Serial No. 09/955,388

Examiner: Mai, Anh D

Confirmation No. 9987

Filed: September 17, 2001

Group Art Unit: 2814

For: SEMICONDUCTOR DEVICE HAVING CONTACT PLUG AND METHOD FOR
MANUFACTURING THE SAME

BOX AF
Assistant Commissioner for Patents
Washington, D.C. 20231

please
Enter p.m. 3/14/03

RESPONSE TO FINAL ACTION

Responsive to the Final Office Action, dated December 16, 2002, please reconsider
the application for the following reasons.

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IN THE CLAIMS

5. A method for manufacturing a semiconductor device comprising:
forming an insulating layer having a contact hole therethrough on a semiconductor
substrate;
forming a diffusion barrier layer on a surface of the insulating layer and on surfaces
within the contact hole; and
forming a contact plug in the contact hole by forming a first sub-plug that fills a lower
portion of the contact hole and forming a second sub-plug that fills an upper portion of the
contact hole on the first sub-plug,
wherein the first sub-plug fills a lower portion of the contact hole to a level
substantially below a top surface of the insulating layer.

See
C1



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BOX AF

Assistant Commissioner for Patents,
Washington, D.C. 20231

Responsive to the Final Office Action dated December 16, 2002, enclosed is an amendment to the above-identified application.

The fee has been calculated as shown below.

CLAIMS AS AMENDED					
For:	Number After Amendment	Previous Number	Extra	Rate	Additional Fee
Total Claims	11	11	0	x \$18 =	\$0.00
Independent Claims	1	1	0	x \$84 =	\$0.00
TOTAL ADDITIONAL FEE FOR THIS AMENDMENT					\$0.00

*greater of twenty (20) or number for which fee has been paid

**greater of three (3) or number for which fee has been paid



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Any deficiency or overpayment should be charged or credited to deposit account number 13-1703.

Respectfully submitted,

MARGER JOHNSON & McCOLLOM, P.C.



20575

PATENT TRADEMARK OFFICE

Alan T. McCollom
Reg. No. 28,881

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1030 SW Morrison Street
Portland, OR 97205
(503) 222-3613

I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE AS FIRST CLASS MAIL IN AN ENVELOPE ADDRESSED TO:
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